

## **The Members of the London Mechanics' Institution 1823-1830**

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The London Mechanics' Institution (LMI) was founded in 1823 to teach working-class men science and technology. So popular was the idea of the institution that an audience of more than 2000 crowded into an inaugural meeting at the Crown and Anchor Tavern in the Strand on 11 November 1823.<sup>1</sup> By July 1824 the LMI had a permanent residence at Southampton Buildings in Chancery Lane. Successful though the institution was, its management, membership and class composition have never been adequately analysed. In fact, the LMI has received surprisingly little attention from historians, and that only tangentially: in biographies of the men involved,<sup>2</sup> in older works dealing with the mechanics' institute movement as a whole,<sup>3</sup> and in accounts of related topics.<sup>4</sup> And even then the institution is generally dismissed as having failed in its appeal to working-class men.

Yet the rarely-consulted LMI archives (housed at Birkbeck College) contain a treasure trove of information which substantially revises the accepted story and provides unprecedented insight into working men's activities and concerns in early nineteenth century London. For the period from 1823-1830, the manuscript LMI Members' Registers record the names, occupations, addresses and subscription payments of approximately 7000 members.<sup>5</sup> A newly digitised database of these Registers,<sup>6</sup> combined with a study of the manuscript LMI management minutes and quarterly reports<sup>7</sup> (along with Francis Place's manuscript account and press coverage<sup>8</sup>), permit a multi-strand contextual analysis.

Both at the time and in the historiography, there have been assertions that there was a middle-class takeover in these early years. But substantiating such a claim is made more hazardous by the difficulties in separating the well-off artisanal working classes from the lower echelons of the middle classes,<sup>9</sup> and it is seriously undercut by the evidence from the quarterly subscriptions recorded in the Registers, which does not reveal such a corresponding

shift in the composition of the membership. George Birkbeck (a Quaker doctor and LMI founding president) consistently maintained that the membership was at least two thirds working class. In fact, the influence and power of the working-class members was enshrined in the LMI Rules and Orders.<sup>10</sup> Two thirds of the management committee, elected every six months, had to be working class. Because committee men were differentiated into ‘working class’ and ‘not of the working class’, many ‘working class’ individuals can be identified. (Working class will appear in quotation marks when referring to the LMI definition. The word middle class was not used, although it will be used here to refer to a small section of men interested in philanthropic activities, reform and scientific endeavours.)

So who were the members? And what can this sample of subscribers tell us about the condition and concerns of certain Londoners working in the capital in the 1820s – particularly about their understanding of class connections?

To establish that the LMI membership can be considered in some way representative of London’s better-off working men as a whole, this paper begins by comparing the number of members in different occupations with the prevalence of those occupations in London generally. It then examines the members’ interpretation of the term ‘working class’: their efforts to provide a definition, and the kinds of men who were elected to the committee in the working-class category. The paper concludes by showing that the lives of individual members, particularly those self-described as ‘working-class’, reveal a surprisingly broad range of interests and achievements.

### **Composition of the membership**

Based on information in the Members’ Registers, the composition of the membership is most readily categorised by occupation. Because the Registers record each member’s subscription payments, an analysis can be made of the ten occupations most represented in each quarter from December 1824 to December 1829. Five occupations consistently had more adherents than any others. These were, in order of numbers: clerk, gentleman, carpenter, printer and cabinet-maker. (One explanation for the large numbers of clerks and gentlemen may be that these are broader categories than carpenter or watch-maker.) The other trades which appeared in the top ten during these 21 quarters were: engineer (for 20 quarters), tailor and engraver (18 quarters each), watch-maker (12), carver (11), jeweller (10), stationer (8), painter (6), and finally brass founder, bookbinder and smith (1 quarter each).<sup>11</sup> No other trades were so highly

represented in any quarter.

Correlating the proportions of members in different trades with the prevalence of those trades in London itself was facilitated by David Barnett's 1998 study of London manufacturing firms in 1826-1827. Barnett drew his data from first-hand sources: Pigot and Co.'s *London and Provincial New Commercial Directory for 1826-27* and the fire office registers held in the Guildhall Library.<sup>12</sup> The membership during the March 1826 quarter (taken from the Members' Registers) was selected for comparison. As shown in Table 1, Barnett produced fourteen categories which can be matched to LMI occupations. (I excluded Barnett's category of metals – representing a minuscule .4% of the total number of firms, and his category of ship-building which, for geographic reasons, was not represented at the LMI.) In general, I was able to match occupations with his quite closely because he clearly defined which occupations he was including in each grouping.<sup>13</sup>

<b>London trades in 1826 categorised by Barnett and comparable with LMI members' trades</b>	<b>Percentages of LMI members in manufacture March 1826 quarter</b>	<b>Barnett's percentages of manufacturing firms from Pigot's 1826-7</b>
Timber	17%	16%
Furniture	11%	11%
Paper and printing	16%	9%
Metal goods	10%	8%
Textiles	5%	8%
Clothing	9%	8%
Leather	1%	7%
Watch-making	4%	4%
Food manufacture	2%	4%
Coach-building	3%	4%
Engineering	4%	3%
Chemicals	3%	3%
Precision instruments	3%	2%
Non-metallic	1%	2%

Percentages of LMI members employed in various trades during the March to June 1826 quarter compared with David Barnett's percentages of manufacturing firms based on his analysis of Pigot and Co.'s *London and Provincial New Commercial Directory for 1826-27*. Neither all of Barnett's categories nor all of LMI members' trades are included. (Percentages have been rounded to the nearest whole figure.)

A recurring problem for both Barnett's and my categorisation was distinguishing retail from manufacture in some of these trades. Barnett noted constant overlaps and reported that when a man's or company's activities were mixed or unclear, he generally opted for categorising them as retail, on the principle that almost everyone who manufactured sold in some respect.<sup>14</sup> Given that the LMI was designed for men who made things with their hands and was generally considered (at least at the beginning) to have been largely made up of such, I have considered all men in these trades to be manufacturers and am thus comparing them directly to Barnett's manufacturers. The fact that neither the LMI nor the 1821 and 1831 censuses distinguished retail from manufacture suggests that the distinction was less important then than now. It is probably safe to assume that the members were not 'shopmen', who were, according to the *Trades' Newspaper*, 'far behind the mechanics in information', mostly because their working hours were too long for them to be able to attend an institution 'of their own' in the evenings.<sup>15</sup>

Although the comparison of LMI membership figures for the March 1826 quarter with Barnett's 1826-7 analysis contains many assumptions, the similarity between the two provides a good starting point for an analysis of the members' occupations. There is a near correlation between the size of some of the industries in London and their representation at the LMI. Substantial differences can probably be explained by the LMI's catchment area and the Institution's particular appeal (that is, what it taught). In *Chrestomathia*, Jeremy Bentham considered two miles the maximum distance pupils would travel to his projected school, and such a figure might be taken for the LMI.<sup>16</sup> The site of the founders' initial meeting at the Crown and Anchor Tavern at the east end of the Strand, by Arundel Street, was the first deciding factor for the LMI's catchment area. Books for members to join were placed at five other sites: Charing Cross, Berners Street (Oxford Street), New Bond Street, Paternoster Row and Fleet Street.<sup>17</sup> It is interesting how far west the founders were originally looking. Very few (if any) must have signed up at Berners Street, New Bond Street or Charing Cross. The centre of activity moved decidedly eastwards. The first lectures were at Monkwell Chapel, off London Wall, and a permanent site was soon established in Southampton Buildings, Chancery Lane. The LMI's catchment area presumably did not overlap those of other early mechanics' institutes, nearby in Spitalfields and Southwark, or further afield in Rotherhithe, East London (Stepney), Hammersmith, or Hackney. The LMI Members' Registers show that the majority of members came from Finsbury and the City.

Many printers (and stationers) were clustered in the area of the Crown and Anchor and Southampton Buildings: around the Inns of Court, and within a square bounded by Chancery Lane, Farringdon Street, Fleet Street and Holborn. Many of the other highly represented trades were prominent in the City and Finsbury, particularly metal-workers, precision-instrument-makers and watch-makers. The lack of ship-builders is explained by their Docklands location, with the institute in Rotherhithe soon catering for them. Perhaps the paucity of leather workers can also be explained. The tanning works were generally south of the river. The establishment of the Southwark Mechanics' Institution suggests that trades conducted south of the river were too far away from the 'parent' institution. However some LMI members did come from Southwark and Bermondsey.

There is a temptation to say that the founding of the Spitalfields Mechanics' Institution in 1825 provided a geographical explanation for the low percentage of textile workers in the LMI. Barnett stressed the importance of the silk industry in his textile category. The LMI weavers came from such places as Ludgate Hill, Cheapside and St Andrews Hill. Certainly there is no reason to think that weavers would not have been interested in what the LMI taught. According to Barnett, 1820s London was one of 'the largest centres of both patented and non-patented textile inventions', and in 1824 the *Mechanics' Magazine* (where the proposal for the LMI appeared) included weavers among the 'journeymen or apprentices' from whom they expected inventions to be produced for a *Mechanics' Magazine* 1824 prize competition.<sup>18</sup> (Helping its members to invent new devices and improve existing ones was a primary LMI focus.) Perhaps the explanation is that during the 1820s the textile industry was being taken over by 'profit-making entrepreneurs' and 'industrial capital' which altered the type of workman employed and thus made textile workers less likely to join the LMI.<sup>19</sup>

The higher percentage of engineers at the LMI has to be attributed to the LMI's mechanical emphasis. The first engineers who joined came from far and wide: from Deptford and Blackfriars, from Pimlico and Regents Park, from Southwark, as well as from Oxford Street, Furnivals Inn, Cow Cross and City Road. Many engineers were involved in the organisational meetings to found the institution.<sup>20</sup> In fact there was a sense in which a true mechanic was an engineer. Members of the Select Committee on artisans and machinery in 1824 referred to engineers as men who could 'properly' be called mechanics.<sup>21</sup> Testifying to the committee, master engineers repeatedly stressed the need for educated engineers.<sup>22</sup>

In order to maintain their position in the fashion-orientated market that was London, workers needed to keep up with the latest developments. A labour-saving or quality-improving invention could transform a business. *The Book of English Trades* emphasised that cabinet-makers must have a knowledge of mechanics (because so many items needed to fulfill multiple functions) and be able to draw in perspective to show how their furniture would look in situ.<sup>23</sup> The members also needed to be able to draw to plan and convey any invention they had in mind. It was not long before the LMI was offering four different drawing classes.<sup>24</sup> The case for the printers' education was emphasised in *The Gorgon*, which criticised the numbers of unskilled men used by master printers.<sup>25</sup> With steam printing presses coming more widely into use, printers needed to be technically adept.

And what of the gentlemen among the membership? Henry Brougham (the Whig MP so active in campaigning for working men's education) delighted in claiming that the need for education was even more acute among gentlemen than among workers.<sup>26</sup> Some gentlemen were keen to understand the technical aspects of what their workmen were doing.<sup>27</sup> Others were amateur turners and inventors.<sup>28</sup> As for clerks, with the increase in manufacture and trade, their numbers were increasing dramatically in the 1820s. An LMI education, offering a greater understanding of trades and processes, was useful for analysing the cost benefits of different procedures.

These predominant occupational groups show that from the start the institution attracted middle-class as well as working-class men. Hence the members' concern to ensure that at least two thirds of the men elected to the management committees were working class. But could they agree on a definition of working class?

### **LMI definitions of working class, mechanic, and operative**

Within a month of the first public meeting to found the institution (held in November 1823), J. C. Robertson, the editor of the *Mechanics' Magazine (MM)* and author of the LMI proposal, had fallen out with his fellow founders. For decades, he remained a severe and vocal critic.<sup>29</sup> He believed that the members' independence had been undermined by accepting gifts from wealthy benefactors. In an effort to bolster his case, Robertson claimed that working-class men had abandoned the institution.<sup>30</sup> So while most LMI members, and the management committees (always two thirds working class), welcomed help from friendly supporters, Robertson ensured that the question of the working-class component of the

membership never died.

But how was the management to tackle this controversy over class? Aside from the distinctions made specifically in connection to the limited number of members who were nominated for the management committees, the majority inside the LMI was never sufficiently concerned to designate the members by social class. The Members' Registers listed occupation only, and it is to these records that the management appears to have turned to address questions about the working-class constituency. In their June 1826 Quarterly Report, the committee men claimed that the proportion for the last quarter of 'the operative to the non-operative is rather more than 3 to 1'.<sup>31</sup> They published no supporting documentation. It is interesting to ponder why the committee used the word 'operative' rather than 'mechanic' or 'working class'. Operative may have been a more fashionable designation. Both the *European* and *Cooper's John Bull* implied as much. The *European*, referring to the LMI membership, spoke of 'journeymen mechanics, – or as the philosophic school more elegantly and *physically* expresses it, – "*the operatives*.'" Whereas *Cooper's John Bull* in 1826 reported that the LMI had been 'created for purpose of teaching the working classes – we beg pardon, the operatives'.<sup>32</sup> Nevertheless, mechanic would have seemed to be the obvious term to use. The institution was first proposed in the *Mechanics' Magazine*, a journal which claimed to be specifically for the working classes.<sup>33</sup>

Ultimately the journal and the institute blurred the distinction between mechanic and inventor. Although historians do not point to the importance of invention in the origins of the LMI, it was a focus of the founding rhetoric and a major part of the curriculum.<sup>34</sup> An understanding of science was linked to practical achievement. The 'objects of science' were, according to Birkbeck in his opening address at the 11 November 1823 meeting, to be found in the inventions of Watt, Bramah, Perkins and Count Rumford.<sup>35</sup> The *MM*'s focus on mechanics as inventors is graphically illustrated in the cover art for its first volume, which illustrates Hermes (associated with inventiveness) surrounded by two columns on which are scrolled the names of ten famous inventors including Priestley, Newton, Rumford and the Marquis of Worcester. This equation of mechanic with inventor meant that almost anyone who joined the LMI, if he had so much as dabbled in invention, could be considered a mechanic. Even John Borthwick Gilchrist, the radical reformer and LMI vice-president, who held the post of Professor at the East India Company's Oriental Institution from 1818 to 1825, referred to himself as a mechanic.<sup>36</sup>

So 'operative' may have been considered a more specific class designation. Because it is possible to analyse the membership for the quarter to which the claim referred, inroads can be made into identifying those whom the LMI managers were designating as 'operatives'. I began by considering that anyone who might possibly have been in manufacture was an operative. The numbers suggest that this approach was correct. The proportion for the period in question, based on the Members' Registers, turned out to be 2.5 operatives to 1 non-operative, not 'rather more than 3 to 1'. The committee appeared to be using a broad definition of operative. According to my analysis, 72% of members were operatives.<sup>37</sup>

While occupation may in many cases indicate class, the trade that a man works in does not automatically indicate his social position. This generous definition of operative did not exclude men who were masters, or who owned extensive works. Well-known employers Richard Taylor and John Martineau were listed simply as printer and engineer.<sup>38</sup> This analysis, based solely on occupation, mistakenly puts them in the 'operative' category. Nor did it exclude men who considered themselves 'gentlemen'. There were men at the LMI who were listed in the Members' Registers once as 'gentleman' and again variously as ladies shoemaker, saddler, engraver, silversmith.<sup>39</sup>

The 'two thirds rule' necessitated a more rigorous analysis in order to ensure that working-class members maintained control of the institution. Reference to the committee nomination lists shows the anomalies even more clearly. Members nominated in the 'not-of-the-working-class' category between December 1825 and December 1827 included an engraver, a printer, a tailor, a jeweller, a veneer-cutter, a printing ink manufacturer, a carver and gilder, an iron-monger, a carpenter, a mechanical-draftsman, a hatter, a confectioner, a silk-embosser, a machinist, and a bead-maker.<sup>40</sup>

The LMI Rules and Orders did not specify the meaning of 'working class'. Perhaps the founders' early definition of 'mechanic' could be considered one: at the 11 November 1823 meeting, the term 'mechanic' was defined specifically for the purpose of deciding who 'should be eligible, and might become a member'. At this point, the deciding characteristic was deemed to be that a man 'earned his living by the work of his hands.' If the membership became too large on the basis of this definition, it was agreed that 'preference should be given to such persons as worked at trades, or in some way assisted in them, for daily weekly or quarterly wages.'<sup>41</sup> The institute's style would certainly have been cramped if such definition had determined who could become a member. Regardless of all the gentlemen, clerks and



teachers who would have been excluded, where would this characterisation have placed men like the working-class shipbuilder John Gast? In December 1825 (at a meeting to establish a Rotherhithe mechanics' institute), Gast declared that 'he was himself a mechanic, and at one time indebted to the labour of these hands (showing his own)'?<sup>42</sup> Presumably he would not have been admitted a member because he was no longer earning his living by the work of his hands. But of course the definition was never used. Men from all walks of life were welcomed.

The Rules merely stated that 'two thirds at least of the Committee of Managers shall be taken from the working classes.'<sup>43</sup> Within a few years, some members were agitating for a definition of 'working class'. Right from the start the 'class' of members voted on to the committee had been contested. Although Francis Place, the master tailor whose personal archive has been a boon to historians and who was intimately involved in founding the LMI, agreed that the categorisation of his son as 'working class' was wrong, the son nonetheless remained a 'working-class' member of the committee.<sup>44</sup>

Later problems revolved around whether men employed others or not, and exactly how wealthy the men were. According to George Adam, a 'working-class' carpenter on the committee, the committee men had agreed on 31 July 1826 that 'no individual employing journeymen should be considered as constituting one of the working class'. Adam complained that the committee was allocating to the working-class category men 'who employed journeymen and of course ought to be considered masters.' The resolution was never acted upon, perhaps because only about half the committee men were present.<sup>45</sup>

At the next election in September 1827, the *Trades' Free Press* redefined the meaning of mechanic' and added a 'poverty' clause. The 'true definition of "mechanics," as applicable to Mechanics Institutes', according to the paper, 'includes two points: – first that the individual *is* a "mechanic" [working with his hands]; and, secondly, that, being a mechanic, he is unable to get the knowledge he desires without uniting his means with other mechanics to procure one master to teach all. We exclude every other individual from the title of mechanic as applied to such Institutions, and defy the subtlest disputant to make him so.' The LMI Rules 'have been perverted by allowing ... gentlemen to be elected members who are not "mechanics working with their own hands, and associating with their fellow-mechanics because unable from *poverty* to get knowledge without such association"' (emphasis added).<sup>46</sup> Again, the definition was not incorporated.

Men who employed others were regularly elected as ‘working class’. George Henry Lyne, for instance, was elected in September 1827 in the ‘working-class’ category. Although a journeyman smith when he joined early on, Lyne had announced in January 1827 that he was now an ‘engineer ... manufacturing machines of his own invention’. We know he was employing others because one of his workmen gave Lyne’s address when he became a member in March 1826.<sup>47</sup> According to Adam, Lyne was ineligible to be elected as a ‘working-class’ committee man. Henry Hetherington, the radical working-class printer soon to be famous for his *Poor Man’s Guardian*, was a ‘working-class’ member of the committee even though he had at least one employee, an apprentice who was himself an LMI member.<sup>48</sup>

There would be no definition of ‘working class’. Many perhaps agreed with a letter writer that the most important consideration was whether nominated men were ‘qualified’ in terms of ‘talent and experience’, not the specifics of what class they might be allocated to.<sup>49</sup> Others may have agreed with W. A. Mackinnon’s 1828 analysis that better-off working-class men could naturally ‘command the constant labour of two labourers’.<sup>50</sup> Whatever the case may be, there is no question that limiting the definition of working class would have greatly reduced the pool from which committee men could have been chosen.

There may be an inclination to feel that this refusal to limit the definition of working-class stemmed from a middle-class effort to usurp control. But were this the case, Henry Hetherington would not have remained on the committee, which he did throughout the period, nor would other vociferous ‘working-class’ radicals have been elected or agreed to serve – men like machinist G. G. Ward, on the founding council of the Metropolitan Political Union,<sup>51</sup> carpenter Joseph Styles, secretary of the Westminster union of the working classes,<sup>52</sup> and George Adam, a leading man in the carpenters’ union (who remained on the committee after his definition was rejected).<sup>53</sup> These men – as shown by an examination of the management committee’s decisions – were not silenced. Nor were they token committee men. In 1829 and 1830, the committee regularly rented the LMI theatre to the Radical Reform Association, founded to achieve universal suffrage and annual Parliaments,<sup>54</sup> and to the London cooperators<sup>55</sup> – probably the largest working-class groups in London. Early meetings to repeal the Stamp Act, which specifically targeted publications aimed at the working classes, took place at the LMI.<sup>56</sup> One anti-Church meeting, held in the institution’s theatre in January 1830 (which I. J. Prothero considered the acme of working-class radical expression), was chaired by Julian Hibbert, atheistic backer of radical causes. Among the anti-Priestcraft

speakers were Hetherington himself (then on the LMI committee), Richard Carlile (publisher of the banned works of Tom Paine), the apostate Revd Robert Taylor, and the atheist Owenite Pierre Baume, himself an LMI member who offered the institution lectures on French literature.<sup>57</sup> My point is that the LMI had a cadre of radicals, who would have been sensitive to mass middle-class intrusion.

### **Working-class possibilities and horizons**

Historiographical accounts often place so much emphasis on working-class insecurity in the 1820s that it becomes difficult to imagine (even skilled) working-class men prospering.<sup>58</sup> Social and economic analyses, usually dealing with long time periods, generally merge mechanics into the lower middle class for the very reason that these artisans were reasonably well-off.<sup>59</sup> Cultural interpretations, focussing on political inequalities, also minimise the prevalence of successful working-class men – but for another reason. Prothero and E. P. Thompson were interested in working-class political and industrial pressure groups campaigning to ameliorate the position of the worst off. According to Thompson, ‘the outstanding fact of the period between 1790 and 1830’ is the formation of the “working class” and the ‘growth of class consciousness’: the working classes began to identify their interests as being ‘against the interests of other classes’.<sup>60</sup> That wealthier working-class men stressed what Thompson called the ‘truly catastrophic nature of the Industrial Revolution’<sup>61</sup> lends great weight to the view that all working men were oppressed. But just because, as the *Westminster Review* put it, ‘skilled labourers’ became ‘the pleaders of the cause of their suffering brethren’ (whose condition was one of ‘positive wretchedness’)<sup>62</sup> does not mean that they too were impoverished.

A broader view of working-class activities and possibilities is necessary to explain what we find at the LMI. The evidence shows that even in the late 1820s, a time considered particularly bleak for artisans, some working-class men were successful, engaged in many pursuits and were publically recognised. The LMI working-class members, at least, showed little signs of impoverishment. Class models, with their distinctions of middle- and working-class men, are further undermined by the LMI clerks who, despite the occupation of clerk being considered middle class, had working-class backgrounds and laboured alongside their brother mechanics. To flesh out these assertions, four areas will be examined in turn: the members’ economic situation, the scope of their activities, their geographical spread, and the

LMI clerks and their relations.

LMI members appear to have been relatively well off. They were able to pay a quarterly subscription fee of 5s from November 1823, and agreed in March 1827 to raise the quarterly subscription to 6s and introduce a one-off entry fee of 2s 6d.<sup>63</sup> On top of these charges, they paid for text books and slates,<sup>64</sup> and sometimes for lighting and heating the rooms in which their classes were held.<sup>65</sup> In June 1825, the French class clubbed together to buy their teacher a ten guinea silver snuff box.<sup>66</sup> (The fact that French language was the most popular LMI class in 1824 shows the calibre of the members.) Another sign of the members' earning power was that the 'working-class' cabinet-maker Richard Botham gained the substantial sum of 4s a week for no more than four hours (unskilled) work collecting tickets at the LMI theatre door on two lecture nights.<sup>67</sup> Botham was unlikely to have been in financial difficulties because he provided free carpentry work at the LMI and a gratuitous class in drawing.<sup>68</sup> Is it surprising that, working class as he was, Botham retired to the country for a month when he was ill?<sup>69</sup>

The first Register contains 4,295 names, and approximately 370 different occupations are represented. The database enables a focus on members from the same family, members at the same address, or members who are listed twice with different occupations. This analysis reveals fluidity between occupations. Men in the same family were not limited to a specific trade. For instance, families living at the same address comprised variously: a cabinet-maker and an engineer (the Sauls in Titchfield street); a compositor and a wire-weaver (the Greenfields of Clerkenwell); a gun-smith and a paper-hanger (the Hammonds of Blackfriars Road); and a boot-maker and a glass-cutter (the Dunts at Charing Cross). The Bacons of Chancery Lane included a copper-plate-ruler, a mathematical-instrument-maker, an engraver, and a brass-turner. Ebenezer Bacon, the copper-plate-ruler, was a 'working-class' stalwart of the LMI from 1824 to 1829. Moreover, a man could make surprising career changes. James Spicer was recorded as a 'stationer' in one Register and a 'rope-maker' in the next. Richard Varney was listed as cook in first register and carpenter in second.<sup>70</sup>

The database also reveals families who crossed the divide between men who worked with their hands and men who did not: an engineer and a tea broker (the Balls of New Street Square); a shoe-maker and a stationer (the Taylors of Bond Street); a water-gilder and a musician (the Marions of Temple Bar). The Registers show that a man could list himself as both a warehouseman and gentleman (for instance Charles Jackson), or a boot-maker and a

clerk (George Johnson).<sup>71</sup> When he ran into difficulties over debt, LMI secretary James Flather, a tin-and-iron-plate-worker, was helped by his barrister brother.<sup>72</sup>

‘Working-class’ LMI members (so identified from their election to the committee) had irons in many fires. Here are seven examples.

1) William Jones was a ‘working-class’ plumber who also acted as the agent for John Roberts’ fireproof ‘hood and mouth piece’, an invention which received much publicity at the LMI and subsequently won a silver medal and fifty guineas from the Society of Arts.<sup>73</sup>

2) John Johnson, a ‘working-class’ whitesmith, had the cover of the *MM* for his detailed proposal for a tunnel under Thames.<sup>74</sup>

3) Maurice Garvey, a ‘working-class’ modeller, drew praise from Brunel himself for his suggestion about how to stop water breaching the Thames tunnel. Recounting the story, the *Register of Arts* praised Garvey as ‘an ingenious man’, ‘an active and useful member of the Committee of the London Mechanics’ Institution’, and a ‘clever and intelligent modeller’.<sup>75</sup>

4) The shoe-maker Mr Francis made ‘an artificial eye on a large scale’ which Birkbeck used to demonstrate the physiology of the senses. Although working at his trade as a shoe-maker when the LMI was founded, Francis had become ‘an optician of some celebrity’ by 1828.<sup>76</sup>

5) The ‘working-class’ stonemason Henry Poole, who taught an LMI practical geometry class, provided a textbook for the class, and planned to become a mathematics teacher.<sup>77</sup>

6) Thomas Holmes, a ‘working-class’ shoemaker, won an LMI prize for an essay on the lever, which he published at his own expense under the LMI’s aegis. Holmes taught English at the LMI gratuitously and by 1836 claimed to have a ‘business ...of the highest respectability’ (he did not specify what it was).<sup>78</sup>

7) George Thurnell, a ‘working-class’ jeweller, wanted to learn drawing to explain his ideas for improving an hydraulic engine. Within a few years of the LMI’s founding, he moved to Stockport to take charge of an Infant School.<sup>79</sup>

These men showed no signs of limited horizons, but rather their activities demonstrated the diversity within the working-class community and its ability to permeate the boundary with the middle class. They mixed easily with men of 'higher' ranks. For instance, when Lord Brougham wanted to find out how the Southwark Mechanics' Institution was faring, he wrote to Charles Parry, a 'working-class' Bermondsey hatter, who was one of the first members of the LMI, and who responded enthusiastically.<sup>80</sup>

Nor do LMI members appear to have suffered from the geographical limitations which historians sometimes impose on the trades which working-class men plied. It has been said that 'with more specialized trades and professions, individual streets were sometimes devoted entirely to particular occupations.'<sup>81</sup> So that, for example, Long Acre was declared to be dedicated to coach-making.<sup>82</sup> In the first Members' Register only one coach-maker out of thirty-one gave his address as Long Acre; he was working in Mercer Street. (Most of the artisans whose details can be ascertained gave an address where they worked.) Of the sixteen men whose occupations included coach-work, whether coach-painter, coach-joiner, coach-smith, coach-wheelwright, none gave a Long Acre address. Furthermore the Registers record seventeen trades unconnected with coach-making in Long Acre.<sup>83</sup> Of course coach-making required many different specialities. The following Long Acre members might or might not have been involved in the trade: iron-monger, japanner, clerk, fringe-maker, goldsmith, upholsterer, mechanist, joiner, gold-refiner, chaser, turner, varnish-maker, carver, painter, brass-founder, smith, varnisher, carpenter.

Discussions of small workshops and trade societies whose membership was 'confined to legal men of a single trade' add to the impression of the isolation of one trade from another.<sup>84</sup> From these accounts it is hard to credit the mix of trades in the same buildings and within the same families that existed at the LMI.

Barnett provided a different analysis of the geography of London's manufacturing firms, and one that is better supported by the LMI data. He noted that 'the overwhelming characteristic of London as a whole during the late eighteenth and early nineteenth centuries was the bewildering industrial and commercial diversity to be found in every district'. Barnett confirmed that 'even in those trades at the upper end of the market, retailers were to be found in large numbers in the poorest neighbourhoods'.<sup>85</sup>

A study of the LMI clerks shows that many were not from the wealthier or more educated backgrounds with which clerks were later associated – an important point given that

Prothero and Thomas Kelly (Birkbeck's biographer) maintained that an influx of clerks at the LMI in the later 1820s was an indication of a changing, more prosperous, clientele.<sup>86</sup> Many LMI clerks worked alongside their mechanic relatives in cabinet-making, carpentry and other businesses. Cross-referencing members who were clerks with other members establishes family relationships which point to a significant number of working-class clerks. Twelve clerks shared a surname and address with men working in trades. The trades were: silversmith (1), brass-founder (1), dyer (1), carpenter (2), hatter (1), jeweller (2), bookbinder (1) and cabinet-maker (3). In the case of George Clement jun., his father was a 'working-class' silversmith on the first committee. The son worked as a clerk ten doors down from his father in Bedford Row.<sup>87</sup> Four men were recorded once as clerk and once as variously a glover, a boot-maker, a cotton manufacturer, and a jeweller.<sup>88</sup>

This category of clerk was on the same social level as his brother mechanic (although the social status of the mechanic remains unknown). The 1819 *London Tradesman* advocated that an aspiring manufacturer be 'employed as a clerk or journeyman, in another house than that where his apprenticeship was served' so as to learn 'new ways of doing business' before returning to his original trade.<sup>89</sup> To run any kind of business a man needed to be able to do his accounts, write letters, and keep track of his affairs. When Place was discussing different levels of workmen in 1833, he believed that most 'shopkeeper's clerks' should be placed in the same category as 'journeymen tradesmen' because they 'receive weekly wages and are paid at about the same rate'. (His other three categories were 'shopmen', 'out of door apprentices' and 'labourer'.)<sup>90</sup>

Only five out of these twenty-one men were not associated with a trade: two were elsewhere listed as 'gentleman', one was related to a 'gentleman', one was a clerk at the Bank of England, and one shared a surname and address with a broker.<sup>91</sup> While this is a tiny percentage of the clerks who were members of the LMI during the period, it nevertheless suggests that a large number of clerks could have been working in trades, and not in the City or the Inns of Court. Were the sample representative, it would mean that 43% of the LMI clerks were related to men who worked in manual occupations, and could thus be considered to have come from a 'working-class' background.

One LMI clerk, George Foskett, exemplifies the dangers of pigeon-holing clerks as middle-class men avowing a different set of values from working-class mechanics. The first secretary of the British Association for the Promotion of Co-operative Knowledge (May

1829), Foscett was a founder (with Hetherington) of the Metropolitan Trades Union which became the National Union of Working Men and Others.<sup>92</sup>

## **Conclusion**

The LMI evidence cautions against generalisations about class and clerks, about social immobility and social control. One of the hallmarks of the LMI's early years appears to have been the easy relationship between the 'working-class' and the 'not-of-the-working-class' committee men. Although there were disagreements about many issues, these never seem to have divided men along class lines. The rapport is perhaps ultimately epitomised in the friendship forged at the LMI between the fiery Henry Hetherington and urbane George Birkbeck. This was to last a lifetime, the doctor even visiting Hetherington when he was in hiding from the authorities for publishing unstamped republican papers.<sup>93</sup>

Thus a study of the London Mechanics' Institution offers an unprecedented opportunity to challenge assumptions about class and trade among the capital's working men, and provides fertile ground for a new assessment of working-class men's relations and cultural horizons. The previously untapped LMI sources explored here are invaluable for providing evidence about how the members developed their language of class and how they anchored that language in their social circumstances. I have placed the members' occupations within the context of London's workplace and analysed members' efforts to define 'working class'. Because the sources identify the men nominated as 'working class', I have been able to make a social correlation. The LMI Registers of Members, which I have digitized and databased, have provided insight into the men's lives (their occupations, addresses, and occasionally their family members and work associates). I have been able to 'connect class discursively understood with class as a component of the structural relations',<sup>94</sup> and in so doing have tested some historiographical generalisations about working-class impoverishment and isolation in the 1820s.



1. *Mechanics' Magazine* (hereafter *MM*), 1 (1824), 177.
2. Thomas Kelly, *George Birkbeck* (Liverpool, 1957), 76-146. John George Godard, *George Birkbeck* (London, 1884), 42-81. David Stack, *Nature and Artifice: The Life and Thought of Thomas Hodgskin 1787-1869* (Woodbridge, Suffolk, 1998), 82-88. Dudley Miles, *Francis Place* (Sussex, 1988), 92-4.
3. For example, Ian Inkster, 'The Social Context of an Educational Movement', *Oxford Review of Education*, 2, no. 3, History and Education, Part One (1976), 277-307 (277, 284-87); Brian Simon, *Studies in the History of Education 1780-1870* (London, 1960), 153-157. Michael D. Stephens and Gordon W. Roderick, 'Science, the Working Classes and Mechanics' Institutes', *Annals of Science*, 29 (1972), 349-60 (349-355, 357); J. W. Hudson, *The History of Adult Education*, (London, 1851), 49-54; E. P. Thompson, *The Making of the English Working Class* (London, 1980 [1963]), 817-18.
4. Gregory Claeys, 'Political Economy and Popular Education', in Michael T. Davis (ed.), *Radicalism and Revolution in Britain* (London, 2000), 157-75 (158-162). I. J. Prothero, *Artisans and Politics in Early Nineteenth-century London* (Folkestone, Kent, 1979), 191-203. James Mussell, "This is Ours and for Us", in David Clifford, Elisabeth Wadge, Alex Warwick (eds), *Repositioning Victorian Sciences* (London, 2006), 107-17, 231-32 (113-15). C. Delisle Burns, *A Short History of Birkbeck College* (London, 1924), 17-59.
5. Birkbeck College, 'L. M. I. Members' Register', vol. 1, December 1824 – December 1826; vol. 2, December 1826 – December 1829 (hereafter MRv1, MRv2).
6. Helen Hudson Flexner, *The London Mechanics' Institution* (University College London, PhD, 2014), 262-402, 415-32.
7. Birkbeck College, 'L. M. I. Minute Book', vol. 1, September 1823 – 5 June 1826; vol. 2, 12 June 1826 – 24 August 1829 (hereafter MBv1, MBv2). The Minute Books are not consistently paginated and are therefore referenced by weekly meeting date. Birkbeck College, 'L. M. I. Minutes of Quarterly General Meetings', vol. 1, 1 March 1824 – 7 September 1831 (hereafter QMv1).
8. British Library, Place Papers, 'Early history of the London Mechanics' Institution', Additional MS 27,823, vol. 35, ff. 240-376. Press: particularly the *MM* and *London Mechanics' Register* (LMR).
9. L. D. Schwarz, *London in the Age of Industrialisation* (Cambridge, 1992), 53; Prothero, 20, 26.
10. *Rules and Orders of the Mechanics' Institution for the Promotion of Useful Knowledge among the Working Classes. Established November 11, 1823* (London: R. Taylor [printer], nd).
11. Flexner, 104, 421-24.
12. David Barnett, *London: Hub of the Industrial Revolution* (London, 1998), 39.

13. Flexner, 425-29.
14. Barnett, 25, 39, 139, 151, 162, 174, 221-22.
15. *Trades' Newspaper* (14 August 1825), 69.
16. Jeremy Bentham, *Chrestomathia* (London, 1816), 78.
17. MBv1, 14 November 1823.
18. Barnett, 54-55. *MM*, 2 (1824), 80.
19. Prothero, 1.
20. John Martineau, Benjamin Bevan, George Mane, Thomas Hall and Robert Mothershed were engineers on the provisional committee: MBv1, 16. Bryan Donkin and Alexander Galloway were present at 8 November 1823 private meeting to set up the institute: Place Papers, 246-47.
21. Parliamentary Papers 1824 (51) iv, *First Report from the Select Committee on Artizans and Machinery*, 37
22. Ibid., 29.
23. Richard Phillips, *The Book of English Trades* (London, 1818), 78.
24. QMv1, 217-18.
25. *Gorgon*, 1 (1819), 221.
26. Henry Brougham, *Practical Observations upon the Education of the People* (London, 1825), 32.
27. *Technical Repository*, 1 (1832), 183.
28. *Weekly Free Press* (20 September 1828), 586.
29. For example, *MM*, 22 (1834-5), 474-76.
30. *MM*, 2 (1824), viii. *MM*, 3 (1825), 192.
31. QMv1, 156.
32. *European* (March 1827), 232. *Cooper's John Bull*, (26 March 1826), 10.
33. *MM*, 1 (1824), iii-iv.
34. Flexner, 43-9, 176-81, 193-98.
35. *MM*, 1 (1824), 179-80.

36. *Trades' Newspaper* (20 May 1827), 357.
37. Flexner, 430-32.
38. Members are most easily identified in the Members' Registers by membership number. Taylor's number was 70 and Martineau's 764. The reference convention hereafter is MRv1, 70 and 764.
39. George Seares (gentleman, MRv1, 2621 and shoemaker MRv2, 1975); Thomas Papworth (gentleman, MRv1, 3900 and saddler, MRv1, 1779); James Frederick Blake (gentleman, MRv2, 1122 and engraver, MRv1, 301); Samuel James Wood: (gentleman, MRv1, 1636 and silversmith, MRv1, 3245)
40. For full details of LMI committees, including references, see Flexner, 403-14.
41. Place Papers, 251.
42. *Morning Post*, 29 November 1825.
43. *Rules*, 6.
44. Place Papers, 284-85.
45. MBv2, 31 July 1826. *Trades' Newspaper* (3 September 1826) 59.
46. *Trades' Free Press* (30 September 1827).
47. MRv1, 199. *MM*, 6 (1827), 528. Apprentice: James Jackson, MRv1, 4516.
48. MRv1, 904. Apprentice: Thomas Halt, MRv1, 4368.
49. *Trades' Free Press*, (26 January 1828), 213.
50. W. A Mackinnon, *On the Rise Progress and Present State of Public Opinion* (London, 1828), 3-4.
51. D. J. Rowe, (ed.), *London Radicalism 1830-1843: A selection of the papers of Francis Place*, (London, 1970), 2.
52. *Prompter*, 1 (1830-1), 826-27.
53. Prothero, 203.
54. Flexner, 224-34.
55. *Ibid.*, 234-52.
56. MBv3, 25 October 1830.

57. Meeting: *Morning Chronicle* (19 January 1830), 2, 3. Prothero, 276-77. Baume, French: MBv2, 26 May 1829.

58. For example, Thompson, esp. 269, 272, 274-75, 281-82, 289-91; Prothero, esp. 210-16, 221; David R. Green, *From Artisans to Paupers* (Aldershot, 1995), esp. 46-8, 57-8, 71, 135, 156; Schwarz, esp. 158, 192-94, 198, 200-201, 205-206.

59. Schwarz, 53; Green, 87; Thompson, 267.

60. Thompson, 212.

61. Ibid., 217.

62. Anon., 'History of the Middling and Working classes', *Westminster Review*, 19 (1833), 485.

63. Initial fees: *Rules*, 7. Increased fees: QMv1, 163-65.

64. For instance, MBv1, 23 May 1825.

65. For instance, MBv2, 4 December 1826.

66. *LMR*, 2 (1825), 42.

67. MBv2, 28 July 1828.

68. MBv2, 26 November 1827. Class: MBv2, 23 June 1828.

69. MBv2, 3 August 1829.

70. Sauls: MRv1, 4411, 4906. Greenfields: MRv2, 5296, 5403. Hammonds: MRv2, 2917, 4766. Dunts: MRv2, 9747, and MRv1, 2620. Bacons: MRv1, 122, 308, 469, 2634. Spicer: MRv1, 2374, and MRv2, 2648. Varney: MRv1, 1807 and MRv2, 4787.

71. Balls: MRv2, 446, 830. Taylors: MRv1, 1990, 3244. Marions: MRv1, 4134, 4135. Jackson: MRv1, 4510 and MRv2, 1752. Johnson: MRv1, 2497, and MRv2, 4081.

72. QMv1, 3. MBv1, 13 December 1824.

73. MRv1, 487. Agent, *LMR*, 2 (1825), 15-16; LMI demonstrations: *LMR*, 1 (1825), 362-63, 370-71. Medal: *LMR*, 1 (1825), 430.

74. MRv1, 219. *MM*, 1 (1824), 258-61.

75. MRv1, 4713. *Register of Arts*, 1 (1828), 308-309.

76. *Morning Chronicle*, 14 January 1828.

77. MRv1, 119. Textbook: MBv2, 4 August 1828. Teacher: *Examiner* (6 December 1829), 774.

78. MRv1, 120. Prize: *Register of Arts and Sciences*, 4 (1827), 293-94. Printing: MBv2, 1 March 1827. Teaching: MBv2, 24 November 1828. Business: Frederic Hill, *National Education* (London, 1836), 203.

79. MRv1, 225. Hill, 216.

80. MRv1, 541. University College London, SDUK papers, Mechanics' Institutes correspondence, Southwark Mechanics' Institute, Charles Parry to H. Brougham, 16 September 1826.

81. Green, 155.

82. Ibid.; Jerry White, *London in the Nineteenth Century* (London, 2007), 175; Prothero, 24.

83. Tailor, cheese-monger, plumber, engraver, solicitor, builder, watch and clock-maker, tool-maker, cabinet-maker, architect, chemist, trunk-maker, lace-man, bookbinder, stationer, writer.

84. Prothero, 40.

85. Barnett, 18, 20, 221.

86. Prothero, 203; Kelly, 100.

87. Silversmith: George Clements, Bedford Row (MRv1, 528); clerk, George Clement jnr, Bedford St (MRv1, 1540). The following mechanics and clerks with the same surname shared the same address.

Brass founder: W. F. Collinson, Chenies St (MRv2, 4292); clerk, Edwin Collinson (MRv2, 4533).

Dyer: William Haddon, Red Cross Sq. (MRv1, 1577); clerk, William Charles Haddon (MRv1, 3703).

Carpenters: George Dunnage, Bagnigge Wells (MRv2, 4050), John Harris, Portman Sq. (MRv2, 1947); clerks, William Dunnage (MRv2, 4049), David Thomas Harris (MRv2, 1990).

Hatter: Matthew Longsdon, Castle St. Borough (MRv2, 1938); clerk, Alfred Longsdon (MRv2, 5563).

Jewellers: James Lucas, Ossulton St, (MRv1, 4139), George Philo, Elliotts Place, Islington (MRv2, 5301); clerks, Samuel Lucas (MRv1, 2643), James Philo (MRv2, 5150).

Cabinet makers: John Murray, Berwick St (MRv2, 4129), Thomas James Simpson, Clifton St (MRv1, 227), James Snoxell, Fleet St (MRv1, 3253); clerks, John Murray jnr (MRv2, 4127), Charles Simpson (MRv2, 5175), Edward Snoxell (MRv1, 2971). (William Snoxell, a venetian shade maker, worked at the same address, MRv1, 2307).

Bookbinder: Charles Robertson, Rolls Bldgs (MRv1, 3057); clerk, James Robertson (MRv1, 3058).

88. Glover and clerk: Thomas Bishop, Cheapside (MRv2, 2402, 5157). Bootmaker and clerk: George Johnson, Newcastle St, Strand (MRv1, 2497, MRv2, 4081). Cotton manufacturer and clerk: Charles Ross, St Paul's Church Yard (MRv1, 2199, MRv2, 1353). Jeweller and clerk: Richard Husband may be the same person as R. C. Husband, both of 68 Barbican, one listed

as a jeweller (MRv1, 2594), the other as a clerk (MRv1, 2193).

89. *The London Tradesman* (London, 1819), 40.

90. University College London, SDUK papers, correspondence, Francis Place to Thomas Coates, 22 December 1833.

91. Listed elsewhere as gentlemen: James Powell (clerk, MRv2, 4072 and gentleman, MRv1, 3619); Arthur Stratford (clerk, MRv2, 939 and gentleman, MRv1 2841). Anthony Rotton (MRv2, 2513), a clerk, shared an address at Newington Green with Richard Rotton (MRv2, 2822), a gentleman. William Duff (MRv1, 4019) was a clerk at the Bank of England. Edmund Dubois (MRv1, 3357) shared an address with James Dubois (MRv1, 3358), a broker.

92. MRv2, 2772. Rowe, 139-40.

93. Patricia Hollis, *The Pauper Press* (Oxford, 1970), 304.

94. Geoff Eley and Keith Nield, *The Future of Class in History* (Ann Arbor, 2007), 124.